

## SEQUENCE LISTING

<110> Conaway, Joan A.  
 Conaway, Ronald C.  
 Kamura, Takumi  
 Oklamoma Medical Research Foundation

<120> Novel Component of von Hippel-Lindau Tumor Suppressor  
 Complex and SCF Ubiquitin Ligase

<130> 021044-004600US

<140> US 09/914,324  
 <141> Not yet assigned

<150> US 60/121,787  
 <151> 1999-02-26

<150> WO PCT/US00/04838  
 <151> 2000-02-25

<160> 12

<170> PatentIn Ver. 2.1

<210> 1  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <223> human ring box protein 1 (Rbx1)

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 Ala Gly Lys Lys Arg Phe Glu Val Lys Lys Trp Asn Ala Val Ala Leu  
 20 25 30  
 Trp Ala Trp Asp Ile Val Val Asp Asn Cys Ala Ile Cys Arg Asn His  
 35 40 45  
 Ile Met Asp Leu Cys Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr  
 50 55 60  
 Ser Glu Glu Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His  
 65 70 75 80  
 Phe His Cys Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu  
 85 90 95  
 Asp Asn Arg Glu Trp Glu Phe Gln Lys Tyr Gly His  
 100 105

<210> 2  
 <211> 121  
 <212> PRT  
 <213> Saccharomyces cerevisiae

&lt;220&gt;

&lt;223&gt; yeast ring box protein 1 (Rbx1)

&lt;400&gt; 2

Met Ser Asn Glu Val Asp Arg Met Asp Val Asp Glu Asp Glu Ser Gln  
 1 5 10 15

Asn Ile Ala Gln Ser Ser Asn Gln Ser Ala Pro Val Glu Thr Lys Lys  
 20 25 30

Lys Arg Phe Glu Ile Lys Lys Trp Thr Ala Val Ala Phe Trp Ser Trp  
 35 40 45

Asp Ile Ala Val Asp Asn Cys Ala Ile Cys Arg Asn His Ile Met Glu  
 50 55 60

Pro Cys Ile Glu Cys Gln Pro Lys Ala Met Thr Asp Thr Asp Asn Glu  
 65 70 75 80

Cys Val Ala Ala Trp Gly Val Cys Asn His Ala Phe His Leu His Cys  
 85 90 95

Ile Asn Lys Trp Ile Lys Thr Arg Asp Ala Cys Pro Leu Asp Asn Gln  
 100 105 110

Pro Trp Gln Leu Ala Arg Cys Gly Arg  
 115 120

&lt;210&gt; 3

&lt;211&gt; 508

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (7)..(333)

&lt;223&gt; Rbx1

&lt;400&gt; 3

cccaaaatgg cggcagcgat ggatgtggat accccgagcg gcaccaacag cggcgcggggc 60  
 aagaagcgc tgaagtga aaagtggat gcagtagccc tctgggcctg ggatattgtg 120  
 gttgataact gtgccatctg caggaaccac attatggatc ttgcataga atgtcaagct 180  
 aaccaggcgt ccgctacttc agaagagtgt actgtcgcat ggggagtctg taaccatgct 240  
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 tgttttgta ttcatatta tgactttccc tgctgttacc taattacaaa ttggatggaa 420  
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 tgtcaaataa agtccagttg gattctgg 508

&lt;210&gt; 4

&lt;211&gt; 480

&lt;212&gt; DNA

&lt;213&gt; Saccharomyces cerevisiae

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (4)..(369)

&lt;223&gt; Rbx1

&lt;400&gt; 4

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aacatataa tggaaccatg cattgaatgc cagccaaaagg ccatgacgga cactgataat 240
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ggtaggtgaa aaaatgaatt gcccgtaaac atttaaataca taccgaggta gaaggattat 420
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&lt;210&gt; 5

&lt;211&gt; 504

&lt;212&gt; DNA

&lt;213&gt; Mus sp.

&lt;220&gt;

&lt;221&gt; CDS

&lt;222&gt; (18)..(344)

&lt;223&gt; Rbx1

&lt;400&gt; 5

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gggacattgt ggttgataac tgtgccatct gcaggaacca cattatggat ctttgtatcg 180
aatgtcaggc caaccaggcg tcagctactt ccgaagagtg tacggttgca tggggagtct 240
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&lt;210&gt; 6

&lt;211&gt; 108

&lt;212&gt; PRT

&lt;213&gt; Drosophila melanogaster

&lt;220&gt;

&lt;223&gt; Drosophila melanogaster ring box protein 1 (Rbx1)

&lt;400&gt; 6

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Met Glu Val Asp Glu Asp Gly Tyr Glu Val Pro Ser Ser Ser Ser Lys
  1             5             10             15

```

```

Gly Asp Lys Lys Arg Phe Glu Val Lys Lys Trp Asn Ala Val Ala Leu
      20             25             30

```

```

Trp Ala Trp Asp Ile Val Val Asp Asn Cys Ala Ile Cys Arg Asn His
      35             40             45

```

```

Ile Met Asp Leu Cys Ile Glu Cys Gln Ala Asn Gln Ala Ser Ala Thr
      50             55             60

```

```

Ser Glu Glu Cys Thr Val Ala Trp Gly Val Cys Asn His Ala Phe His
      65             70             75             80

```

```

Phe His Cys Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys Pro Leu
      85             90             95

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Asp Asn Arg Glu Trp Asp Phe Gln Lys Tyr Gly His  
 100 105

<210> 7

<211> 110

<212> PRT

<213> *Caenorhabditis elegans*

<220>

<223> *Caenorhabditis elegans* ring box protein 1 (Rbx1)

<400> 7

Met Ala Gln Ala Ser Asp Ser Thr Ala Met Glu Val Glu Glu Ala Thr  
 1 5 10 15

Asn Gln Thr Val Lys Lys Arg Phe Glu Val Lys Lys Trp Ser Ala Val  
 20 25 30

Ala Leu Trp Ala Trp Asp Ile Gln Val Asp Asn Cys Ala Ile Cys Arg  
 35 40 45

Asn His Ile Met Asp Leu Cys Ile Glu Cys Gln Ala Asn Gln Ala Ala  
 50 55 60

Gly Leu Lys Asp Glu Cys Thr Val Ala Trp Gly Asn Cys Asn His Ala  
 65 70 75 80

Phe His Phe His Cys Ile Ser Arg Trp Leu Lys Thr Arg Gln Val Cys  
 85 90 95

Pro Leu Asp Asn Arg Glu Trp Glu Phe Gln Lys Tyr Gly His  
 100 105 110

<210> 8

<211> 18

<212> PRT

<213> *Saccharomyces cerevisiae*

<220>

<223> Anaphase-Promoting Complex subunit APC11 sequence

<400> 8

Met Lys Val Lys Ile Asn Glu Val His Ser Val Phe Ala Trp Ser Trp  
 1 5 10 15

His Ile

<210> 9

<211> 69

<212> PRT

<213> *Saccharomyces cerevisiae*

<220>

<223> Anaphase-Promoting Complex subunit APC11 sequence

&lt;400&gt; 9

Asp Glu Asp Val Cys Gly Ile Cys Arg Ala Ser Tyr Asn Gly Thr Cys  
 1 5 10 15

Pro Ser Cys Lys Phe Pro Gly Asp Gln Cys Pro Leu Val Ile Gly Leu  
 20 25 30

Cys His His Asn Phe His Asp His Cys Ile Tyr Arg Trp Leu Asp Thr  
 35 40 45

Pro Thr Ser Lys Gly Leu Cys Pro Met Cys Arg Gln Thr Phe Gln Leu  
 50 55 60

Gln Lys Gly Leu Ala  
 65

&lt;210&gt; 10

&lt;211&gt; 13

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: von  
 Hippel-Lindau (VHL) tumor suppressor complex  
 tryptic peptide

&lt;400&gt; 10

Asn His Ile Met Asp Leu Cys Ile Glu Cys Gln Ala Asn  
 1 5 10

&lt;210&gt; 11

&lt;211&gt; 14

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: von  
 Hippel-Lindau (VHL) tumor suppressor complex  
 tryptic peptide

&lt;400&gt; 11

Gln Val Cys Pro Leu Asp Asn Arg Glu Trp Glu Phe Gln Lys  
 1 5 10

&lt;210&gt; 12

&lt;211&gt; 6

&lt;212&gt; PRT

&lt;213&gt; Artificial Sequence

&lt;220&gt;

<223> Description of Artificial Sequence: von  
 Hippel-Lindau (VHL) tumor suppressor complex  
 tryptic peptide

&lt;400&gt; 12

Trp Asn Ala Val Ala Leu  
 1 5